West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-MSWLGP-2011-07900103

Application Received: October 20, 2010 Plant Identification Number: **079-00103** Permittee: **Disposal Service, Inc.**

Mailing Address: P. O. Box 448, Hurricane, WV 25526

Physical Location: Hurricane, Putnam County, West Virginia

UTM Coordinates: 410.86 km Easting • 4250.24 km Northing • Zone 17

Directions: On the right hand side of State Route 34, approximately 1/2 mile south of

the intersection of State Route 34 and U.S. Route 60 near Hurricane in

Putnam County.

Facility Description

The Disposal Service, Inc. (DSI) sanitary landfill (NAICS 562212, SIC 4953) is comprised of approximately 335.3 acres which includes two disposal areas (covering 84.7 acres) and support facilities. The disposal areas are commonly referred to as Phase I and Phase II. Phase I has a design capacity of 4,618,263 Mg on 44.5 acres for disposal operations. A Phase II disposal area (future) is 40.2 acres with a design capacity of 4,618,574 Mg. As Phase I approaches capacity, Phase II will be opened to continue waste disposal operations. The landfill accepts an average of 500 tons per day. Phase I is expected to reach capacity in year 2021, Phase II is assumed to reach its design capacity in year 2074.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]				
Regulated Pollutants	Potential Emissions	2009-2010 Actual Emissions		
Carbon Monoxide (CO)	47.2	0		
Nitrogen Oxides (NO _X)	2.19	0		
Particulate Matter (PM ₁₀)	43.61	Included in TSP		

Total Particulate Matter (TSP)	186.64	50.55
Sulfur Dioxide (SO ₂)	1.01	0
Volatile Organic Compounds (VOC)	23.93	7.86

 PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2009-2010 Actual Emissions
Dichloromethane (methylene chloride)	1.55	0.5875
Toluene	4.69	1.775
Xylenes	1.66	0.6295
Other HAPs	6.3	2.208
Total HAPs	14.2	5.2

Some of the above HAPs may be counted as PM or VOCs.

Regulated Pollutant other than Criteria & HAP Potential emissions – Carbon dioxide – 34,979 tpy and Hydrogen Sulfide – <math>1.60 tpy.

Non-methane organic compounds (NMOC) – The projected closure year is 2074 with a projected maximum NMOC emission rate estimate of 13.5 Mg/yr.

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, Disposal Service, Inc.'s landfill is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary
		sources
	45CSR23	To Prevent and Control Emissions from
		Municipal Solid Waste Landfills
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart WWW	Standard of Performance for Municipal
	•	Solid Waste Landfills
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances

State Only:	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Particulate Matter
		Air Pollution from Materials Handling,
		Preparation, Storage and other sources of
		Fugitive Particulate Matter
	45CSR42	Greenhouse Gas Emissions Inventory
		Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Date of Consent Order Number Issuance		Permit Determinations or Amendments That Affect the Permit (if any)		
R13-2688	1-30-2007	N/A		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

Since the last renewal the following has changed:

1. Construction permit R13-2688 has been issued to install 20, 2" vent flares to control odor. The combined total emissions from these flares have limits for criteria pollutants; these are secondary emissions from the flares. The permit limits in R13-2688 were based on maximum landfill gas generation and AP-42 factors; therefore, no compliance demonstration is necessary.

Following is a discussion of applicability and non-applicability of rules mentioned in the general permit that apply to this facility:

- 1. 45CSR4 Flares will be installed to control odor. Also according to section 3.1.4 of the general permit, facility has to comply with 45CSR§4-3.1 to control odor.
- 2. 45CSR6 Flares are subject to 45CSR6. Per 45CSR§6-4.1, these flares must meet the particulate matter limit by weight. The individual flare will have an allowable particulate matter emission rate of 0.16 pounds per hour (based on maximum design-input load of 58 lb/hr). This allowable rate is higher than the 0.006 lb/hr hourly rate limit in R13-2688 (Total PM emission limit from all 20 flares = 0.6 tpy which equates to 0.006 lb/hr per flare). Thus, meeting R13-2688 limit shall show compliance with 45CSR6 limit.
 - Per 45CSR§§6-4.3 and 4.4, the visible particulate matter emissions from each flare shall not exceed twenty (20%) percent opacity except for visible particulate emission less than 40% for a period or periods aggregating no more than 8 minutes per start-up. Flares shall comply with 45CSR§§6-4.3 and 4.4 by complying with R13-2688 and sections 5.1.1-5.1.6 and 5.5.1 of the general permit. Compliance will be demonstrated through monthly visible emission checks, record keeping and reporting.
- 3. 45CSR7 This rule is not applicable because there are no material handling equipments at this facility.

- 4. 45CSR17 Facility shall comply with 45CSR17 by complying with sections 3.1.9 and 3.1.10 of the permit.
- 5. 40 C.F.R. Part 60 Subpart WWW Standards of Performance for Municipal Solid Waste Landfills, and 45CSR23 To Prevent and Control Emissions from Municipal Solid Waste Landfills

This facility is subject to these rules and shall comply with these rules by complying with sections 4.0.1, 4.1.1, 4.1.2 and 4.1.3 of the general permit. The calculated NMOC emission rate is less than 50 megagrams per year (The projected closure year is 2074 with a projected maximum NMOC emission rate estimate of 13.5 Mg/yr), hence the facility does not have to install collection and control system that captures the gas generated within the landfill according to 40 C.F.R § 60.752(b)(2).

This facility is subject to these rules according to 60.750(a) because this landfill commenced construction, reconstruction or modification on or after May 30, 1991. This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters; hence the facility has to comply with the following sections of Subpart WWW:

- 60.752(b) 60.752(b)(2) is not applicable if NMOC is less than 50 Mg.
- 60.752(d) this section addresses the closure of the landfill.
- 60.753 this section is not applicable if NMOC is less than 50 Mg.
- 60.754 Test methods and procedures.
- 60.755 this section is not applicable if NMOC is less than 50 Mg.
- 60.756 this section is not applicable if NMOC is less than 50 Mg.
- 60.757(a) and (b) reporting requirements for this landfill.
- 60.757 (c) to (g) these sections are not applicable if NMOC is less than 50 Mg.
- 60.758(a) & (f) Recordkeeping Requirements.
- 60.758 (b) to (e) these sections are not applicable if NMOC is less than 50 Mg.
- 60.759 this section is not applicable if NMOC is less than 50 Mg.
- 6. 40 C.F.R. Part 63 Subpart AAAA A facility is subject to this subpart if the facility meets the criteria in 40 C.F.R. § 63.1925 (a) or (b).
 - 40 C.F.R. § 63.1925 (a) If the facility own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:
 - (1) The MSW landfill is a major source of HAPs.
 - (2) The MSW landfill is collocated with a major source of HAPs.
 - (3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

This facility is not a major source of HAPs or not collocated with a major source of HAPs.

The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC [The projected closure year is 2074 with a projected maximum NMOC emission rate estimate of 13.5 Mg/yr.].

Hence the facility is not subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1925 (a).

Note: In the future if the estimated uncontrolled emissions become more than 50 megagrams per year (Mg/yr) NMOC, then this facility will be subject to 40 C.F.R. Part 63 Subpart AAAA.

40 C.F.R. § 63.1925 (b) If the facility own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in 40 C.F.R §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:

- (1) The MSW landfill is a major source of HAPs.
- (2) The MSW landfill is collocated with a major source of HAPs.
- (3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.

This facility do not have a bioreactor, hence the facility is not subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1925 (b).

- 7. 40 C.F.R. Part 60 Subpart OOO This rule is not applicable because there are no nonmetallic material processing equipment at this facility.
- 8. 40 C.F.R. Part 60 Subpart JJJJ This rule is not applicable because there are no stationary spark ignition (SI) internal combustion engines (ICE) at this facility.
- 9. 40 C.F.R. Part 60 Subpart IIII This rule is not applicable because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
- 10. 40 C.F.R. Part 60 Subpart KKKK This rule is not applicable because there is no stationary combustion turbine at this facility.
- 11. 40 C.F.R. Part 61 Subpart M Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 40 C.F.R. §§ 61.149, 61.150, or 61.155 shall meet the requirements of 40 C.F.R. § 61.154 as described in section 7.0 of the general permit.
- 12. 45CSR2 This rule is not applicable because there are no fuel burning units at this facility.
- 13. 40 C.F.R. Part 63 Subpart ZZZZ This rule is not applicable because there is no stationary RICE (A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile0 at this facility.
- 14. 40 C.F.R. 60.18 the flares at the facility are installed for odor control only. As explained above they are not installed as NSPS control system, hence 40 CFR 60.18 is not applicable to them.
- 15. There are no Greenhouse Gas Clean Air Act requirements for this facility because this is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 CFR64 (CAM) - 20, 2" vent flares are permitted to control odor. The combined total emissions from these flares have limits for criteria pollutants; these are secondary emissions from the flares. These flares are not used as control devices to achieve compliance with any emission limitations or standards; according to 40 C.F.R. 64.2(a) CAM is not applicable to these flares. The facility does not have a pollutant specific emissions unit with a control device to meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

2.

40 CFR Part 60 Subpart Kb (July 23, 1984)	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels). The facility does not have a storage vessel subject to this part.
40 C.F.R. §60.657 (a)(3) (March 12, 1996)	The design capacity of this facility is greater than 2.5 million megagrams and 2.5 million cubic meters. Therefore, amended design capacity reports are not required.

3. The following tank is taken out of the permit because there are no applicable requirements:

Emission Unit	Emission	Emission Unit	Year Installed	Design	Control
ID	Point ID	Description	or Modified	Capacity	Device
004	004	Diesel Fuel	2001	10,000	None
		Tank		Gallons	

4. The following storage pond is taken out of the permit because there are no applicable requirements.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device
002	002	Leachate Storage Pond	1980's	673,000 Gallons	None

The following was explained in 1996 factsheet: The facility has one 673,000 gallon leachate storage pond which could be subject to 40 C.F.R 60 Subpart Kb based upon its size and construction date. However, based on the definition of affected facility (storage vessel) in this rule, "Storage vessel means each tank, reservoir, or container used for the storage of volatile organic liquids...," the leachate pond is a surface impoundment that would not support having controls in place, such as a fixed roof with a closed vent and therefore is not considered a "storage vessel."

5. Non-applicability of 40 C.F.R. 60 Subpart WWW requirements for flares - DSI's landfill is currently subject to this subpart due to its designed capacity. However, the total amount of NMOCs emitted from the landfill determines if a facility is required to actively collect and control the LFG or if the LFG can passively vent to the atmosphere. DSI's landfill is not required to actively collect and control LFG because the maximum NMOC emission estimate is 13.5 Mg/yr as explained above; this is well below the threshold value of 50 Mg/year. Thus, these proposed flares are not subject to this subpart.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: July 11, 2011 Ending Date: August 25, 2011

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

N/A

Point of Contact

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Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

(Choose) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.